

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorders Division
Washington, D.C. 20594



Special Study

DCA06MM001

by

Joseph A. Gregor

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December 8, 2005

GPS Receiver

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A. ACCIDENT

Location: Lake George, NY
Date: October 2, 2005
Time: 1500 Eastern Daylight Time (EDT)
Vehicle: SPV Ethan Allen
NTSB Number: DCA06MM001

B. GROUP – No Group

C. SUMMARY

The SPV Ethan Allen, a 40 foot long ferry boat, capsized in Lake George, New York at approx. 1500 EDT on October 2, 2005. The vessel went to the bottom in 70 feet of water. Local law enforcement reported that there were 48 persons aboard; 20 fatalities, 7 injured, and all of the remainder accounted for including the pilot (captain) who survived. Local officials (Department of Parks and Recreation) say the Ethan Allen passed inspection in May.

On October 9 NTSB investigators sailed aboard another ferry following the track assumed to have been sailed by the accident vessel. A Garmin eTrex Legend and a Garmin GPS 48 were delivered to the NTSB Recorder Laboratory on October 24, 2005. GPS position data was successfully downloaded from both devices. This data was overlaid on a terrain map using *Microsoft MapPoint 2002*. No group was convened for this activity.

D. DETAILS OF INVESTIGATION

GPS receivers acquire and process low-level radio signals broadcast from a constellation of 28 Department of Defense (DoD) satellites in geo-synchronous orbit about the Earth. This information is used to determine receiver position with respect to a coordinated system fixed about the earth. The most common reference employed by commercial GPS receivers is the WGS84 datum.¹ In order to fix a position on the earth's surface (a 2-D fix), the GPS receiver must synchronize to signals from at least 3 satellites. In order to fix position in all three dimensions (a 3-D fix), the receiver must synchronize to signals from at least 4 satellites. The current theoretical horizontal accuracy of a civilian GPS receiver is approximately 30 meters (98.4 feet) CEP.²

The Garmin eTrex Legend is a battery operated handheld mapping GPS receiver containing a full basemap of North and South America along with marine aids to navigation. This device was designed to incorporate correction data obtained from the Wide Area Augmentation System (WAAS), providing position accuracy to less than three meters when receiving WAAS corrections. The basemap contains lakes, rivers, cities, interstates, national and state highways, railroads, and coastlines. The eTrex Legend is equipped with eight megabytes of memory, permitting acceptance of downloaded map data from Garmin's proprietary line of MapSource CD-ROMs.

The Garmin GPS 48 is a basic battery operated marine handheld GPS navigation receiver packaged in a rugged water-resistant case. The GPS 48 features a 12 parallel channel receiver and a marine database that graphically displays city locations and nautical navaids on a moving map display.

Both units were in good condition and powered up normally. Tracklog data was downloaded from both units into a Windows PC using GPS Utility 4.15.³ Appendix A enumerates the downloaded waypoint definition and tracklog position information from the eTrex Legend Appendix B enumerates the downloaded waypoint definition and tracklog

¹ World Geodetic System 1984 (WGS 84) is an earth fixed global reference frame, including an earth model. It is defined by a set of parameters which define the shape of an earth ellipsoid, its angular velocity, and the earth mass included in the ellipsoid reference, along with a detailed gravity model. WGS 84 is used for defining coordinates in surveying as well as in determination of the orbits of GPS navigation satellites.

² Circular Error Probability: A measure of the probable error which refers to the radius of a circle in which 50% of the values occur (i.e. if a CEP of 100 meters is quoted then 50% of absolute horizontal point positions should be within 100 meters of the true position).

³ A software application designed for downloading, mapping, and managing data from a wide variety of GPS receiver/datalogger platforms.

position information from the GPS 48. Tracklog data from both units was plotted over a terrain map using *Microsoft MapPoint 2002*. Figure 1 gives position information for the entire tracklog for both units. Position location data from the eTrex Legend is indicated by the dark blue dots. Position location data from the GPS 48 is indicated by the light blue dots. Because of the scale used in figure 1, only data from the GPS48 is visible in this figure. Figures 2 – 4 give position information on an expanded scale for with information tags displaying lat/lon position and time at approximate 15 minute intervals.

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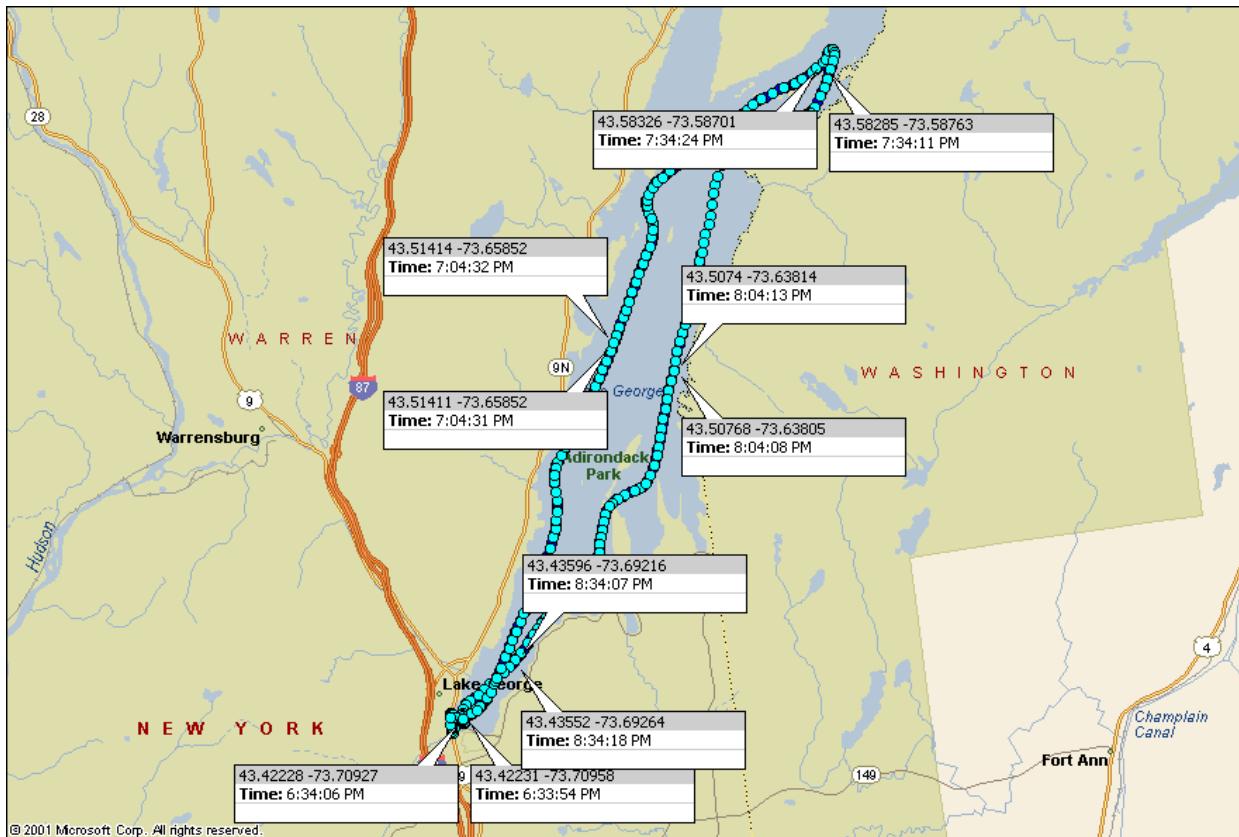


Figure 1. Overlay of GPS data onto topographical map using *Microsoft MapPoint 2002*. Position location information for the entire trip is indicated by the light blue dots. Only data for the Garmin GPS 48 is visible in this figure due to the scale and the close proximity of the two GPS units from one another.

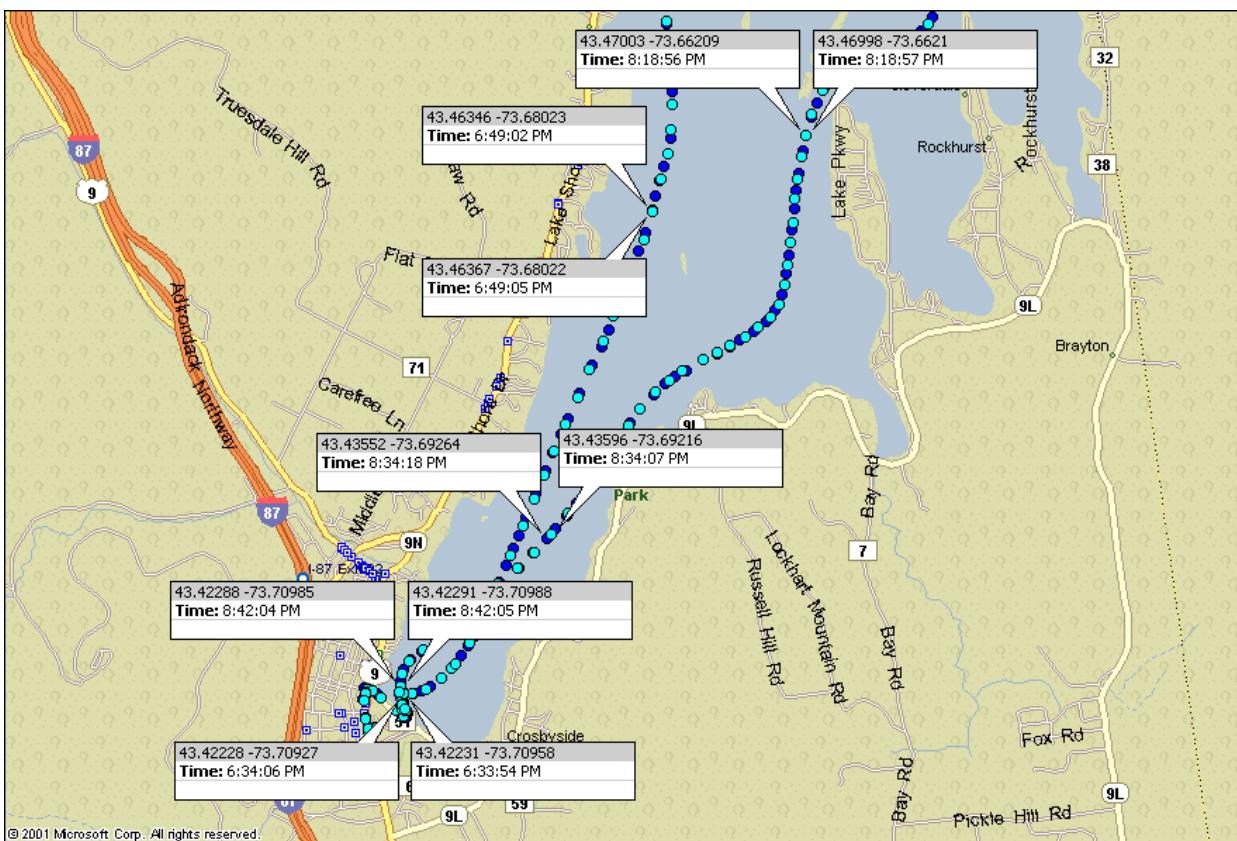


Figure 2. Overlay of GPS data onto topographical map using *Microsoft MapPoint 2002* showing the southern segment of the trip. Position location information for the GPS 48 is indicated by the light blue dots. Position location information for the eTrex is indicated by the dark blue dots.



Figure 3. Overlay of GPS data onto topographical map using *Microsoft MapPoint 2002* showing the central segment of the trip. Position location information for the GPS 48 is indicated by the light blue dots. Position location information for the eTrex is indicated by the dark blue dots.

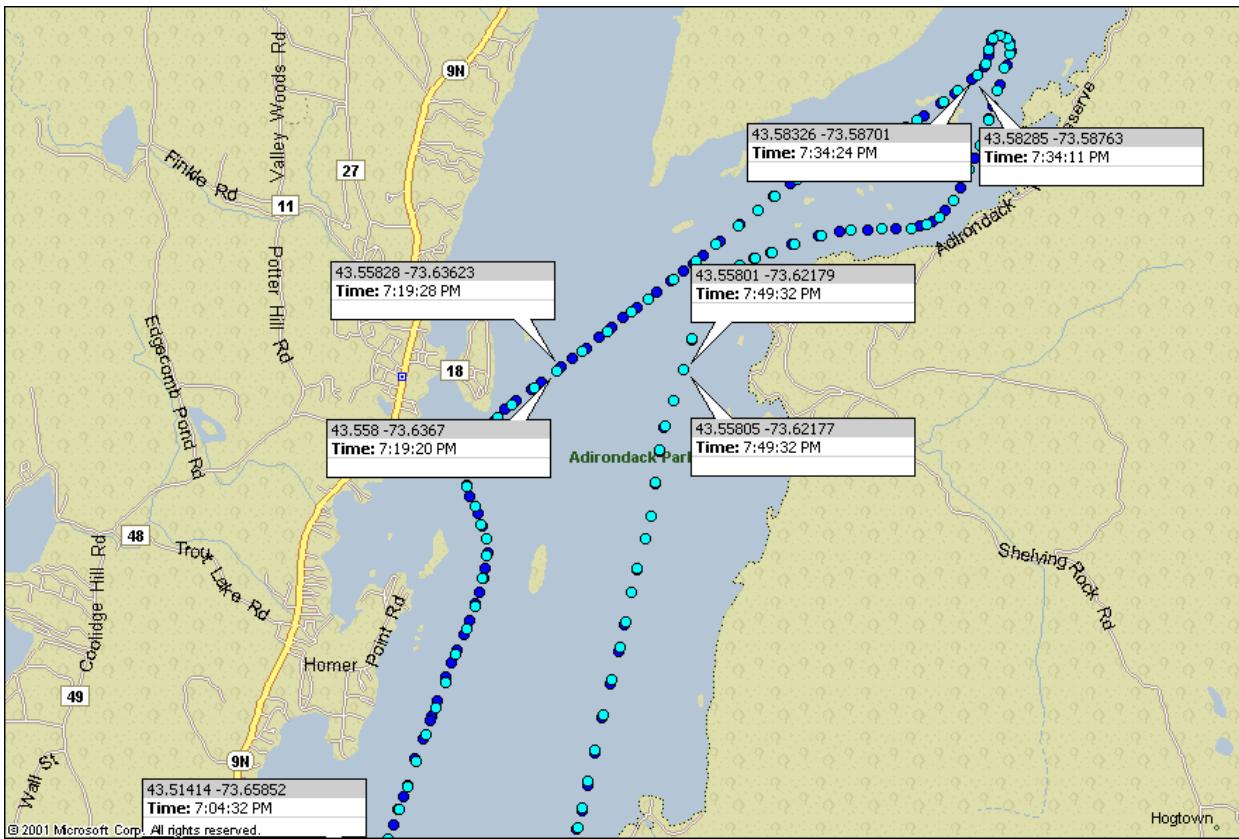


Figure 2. Overlay of GPS data onto topographical map using *Microsoft MapPoint 2002* showing the northern segment of the trip. Position location information for the GPS 48 is indicated by the light blue dots. Position location information for the eTrex is indicated by the dark blue dots.

APPENDIX A

Data Downloaded from the Garmin GPS 48.

T	N43°25.0852'	W073°42.7957'	10/9/2005	17:37:06	1	0:00:03	0.025	29.6
T	N43°25.1058'	W073°42.8038'	10/9/2005	17:37:09	0	0:00:10	0.068	22.4
T	N43°25.1431'	W073°42.8125'	10/9/2005	17:37:16	0	0:00:17	0.107	19.8
T	N43°25.1525'	W073°42.7684'	10/9/2005	17:37:23	0	0:00:23	0.125	10.8
T	N43°25.1650'	W073°42.7555'	10/9/2005	17:37:29	0	0:00:36	0.129	1.1
T	N43°25.1670'	W073°42.7597'	10/9/2005	17:37:42	0	0:12:41	0.008	0
T	N43°25.1621'	W073°42.7623'	10/9/2005	17:45:43	1	0:12:48	0.041	16.8
T	N43°25.1612'	W073°42.7719'	10/9/2005	17:58:24	0	0:12:54	0.05	5.5
T	N43°25.1457'	W073°42.8047'	10/9/2005	17:58:31	0	0:13:04	0.066	5.6
T	N43°25.2114'	W073°42.8421'	10/9/2005	17:58:55	0	0:13:12	0.131	29.6
T	N43°25.3012'	W073°42.8501'	10/9/2005	17:59:07	0	0:13:24	0.235	31.1
T	N43°25.3340'	W073°42.8424'	10/9/2005	17:59:15	0	0:13:32	0.273	17.3
T	N43°25.3395'	W073°42.8405'	10/9/2005	17:59:24	0	0:13:41	0.28	2.6
T	N43°25.3421'	W073°42.8392'	10/9/2005	17:59:49	0	0:14:06	0.283	0.5
T	N43°25.3598'	W073°42.8282'	10/9/2005	18:00:32	0	0:14:49	0.305	1.9
T	N43°25.3520'	W073°42.7912'	10/9/2005	18:00:38	0	0:14:55	0.338	19.3
T	N43°25.3166'	W073°42.7294'	10/9/2005	18:00:47	0	0:15:04	0.404	26.3
T	N43°25.2526'	W073°42.6226'	10/9/2005	18:01:02	0	0:15:19	0.519	27.8
T	N43°25.2249'	W073°42.5762'	10/9/2005	18:01:14	0	0:15:31	0.57	15.1
T	N43°25.2255'	W073°42.5698'	10/9/2005	18:01:24	0	0:15:41	0.575	2
T	N43°25.2288'	W073°42.5653'	10/9/2005	18:01:41	0	0:15:58	0.58	1.1
T	N43°25.2445'	W073°42.5698'	10/9/2005	18:01:57	0	0:16:14	0.599	4.2
T	N43°25.2664'	W073°42.5746'	10/9/2005	18:02:08	0	0:16:25	0.624	8.4
T	N43°25.2671'	W073°42.5749'	10/9/2005	18:02:31	0	0:16:48	0.625	0.1
T	N43°25.2703'	W073°42.5746'	10/9/2005	18:02:38	0	0:16:55	0.629	1.9
T	N43°25.2709'	W073°42.5746'	10/9/2005	18:02:55	0	0:17:12	0.63	0.2
T	N43°25.2500'	W073°42.5685'	10/9/2005	18:05:26	0	0:19:43	0.654	0.6
T	N43°25.2471'	W073°42.5505'	10/9/2005	18:05:52	0	0:20:09	0.67	2.1
T	N43°25.2497'	W073°42.5521'	10/9/2005	18:06:12	0	0:20:29	0.673	0.6
T	N43°25.2574'	W073°42.5617'	10/9/2005	18:10:38	0	0:24:55	0.685	0.2
T	N43°25.2497'	W073°42.5637'	10/9/2005	18:15:10	0	0:29:27	0.694	0.1
T	N43°25.2667'	W073°42.5730'	10/9/2005	18:15:39	0	0:29:56	0.715	2.6
T	N43°25.2600'	W073°42.5743'	10/9/2005	18:16:03	0	0:30:20	0.723	1.2
T	N43°25.2600'	W073°42.5791'	10/9/2005	18:16:37	0	0:30:54	0.727	0.4
T	N43°25.2841'	W073°42.5788'	10/9/2005	18:32:13	0	0:46:30	0.755	0.1
T	N43°25.3289'	W073°42.5878'	10/9/2005	18:32:56	0	0:47:13	0.807	4.4
T	N43°25.3456'	W073°42.6026'	10/9/2005	18:33:28	0	0:47:45	0.83	2.6
T	N43°25.3388'	W073°42.5749'	10/9/2005	18:33:54	0	0:48:11	0.854	3.4
T	N43°25.3388'	W073°42.5083'	10/9/2005	18:34:24	0	0:48:41	0.91	6.7
T	N43°25.3633'	W073°42.4140'	10/9/2005	18:35:00	0	0:49:17	0.994	8.4
T	N43°25.4203'	W073°42.3010'	10/9/2005	18:35:47	0	0:50:04	1.109	8.8
T	N43°25.4676'	W073°42.2289'	10/9/2005	18:36:20	0	0:50:37	1.19	8.9
T	N43°25.4924'	W073°42.2019'	10/9/2005	18:36:36	0	0:50:53	1.226	8.2
T	N43°25.5966'	W073°42.1005'	10/9/2005	18:37:30	0	0:51:47	1.373	9.8
T	N43°25.6922'	W073°42.0255'	10/9/2005	18:38:08	0	0:52:25	1.5	12
T	N43°25.8146'	W073°41.9547'	10/9/2005	18:38:49	0	0:53:06	1.653	13.4
T	N43°25.8561'	W073°41.9280'	10/9/2005	18:39:03	0	0:53:20	1.706	13.6
T	N43°25.8989'	W073°41.9003'	10/9/2005	18:39:17	0	0:53:34	1.76	14
T	N43°26.0469'	W073°41.8108'	10/9/2005	18:40:03	0	0:54:20	1.946	14.6

T	N43°26.2011'	W073°41.7252'	10/9/2005	18:40:50	0	0:55:07	2.138	14.7
T	N43°26.3357'	W073°41.6492'	10/9/2005	18:41:31	0	0:55:48	2.305	14.7
T	N43°26.4570'	W073°41.5797'	10/9/2005	18:42:08	0	0:56:25	2.457	14.7
T	N43°26.5799'	W073°41.5063'	10/9/2005	18:42:46	0	0:57:03	2.611	14.6
T	N43°26.7196'	W073°41.4227'	10/9/2005	18:43:29	0	0:57:46	2.786	14.7
T	N43°26.8596'	W073°41.3406'	10/9/2005	18:44:12	0	0:58:29	2.962	14.7
T	N43°26.9980'	W073°41.2530'	10/9/2005	18:44:55	0	0:59:12	3.137	14.7
T	N43°27.1422'	W073°41.1607'	10/9/2005	18:45:40	0	0:59:57	3.32	14.7
T	N43°27.2729'	W073°41.0860'	10/9/2005	18:46:20	0	1:00:37	3.483	14.7
T	N43°27.3910'	W073°41.0190'	10/9/2005	18:46:56	0	1:01:13	3.63	14.7
T	N43°27.5208'	W073°40.9466'	10/9/2005	18:47:36	0	1:01:53	3.791	14.5
T	N43°27.6646'	W073°40.8726'	10/9/2005	18:48:20	0	1:02:37	3.968	14.5
T	N43°27.8079'	W073°40.8137'	10/9/2005	18:49:02	0	1:03:19	4.14	14.8
T	N43°27.9772'	W073°40.7506'	10/9/2005	18:49:51	0	1:04:08	4.342	14.8
T	N43°28.1069'	W073°40.6988'	10/9/2005	18:50:29	0	1:04:46	4.498	14.7
T	N43°28.2298'	W073°40.6791'	10/9/2005	18:51:04	0	1:05:21	4.64	14.7
T	N43°28.3579'	W073°40.6717'	10/9/2005	18:51:41	0	1:05:58	4.788	14.4
T	N43°28.5124'	W073°40.6759'	10/9/2005	18:52:25	0	1:06:42	4.966	14.6
T	N43°28.6499'	W073°40.6930'	10/9/2005	18:53:04	0	1:07:21	5.125	14.7
T	N43°28.7841'	W073°40.7081'	10/9/2005	18:53:42	0	1:07:59	5.28	14.7
T	N43°28.9057'	W073°40.7171'	10/9/2005	18:54:18	0	1:08:35	5.42	14
T	N43°28.9991'	W073°40.7033'	10/9/2005	18:54:50	0	1:09:07	5.528	12.2
T	N43°29.0831'	W073°40.6563'	10/9/2005	18:55:20	0	1:09:37	5.633	12.5
T	N43°29.1825'	W073°40.5774'	10/9/2005	18:55:53	0	1:10:10	5.765	14.4
T	N43°29.3052'	W073°40.4886'	10/9/2005	18:56:32	0	1:10:49	5.924	14.7
T	N43°29.4391'	W073°40.3988'	10/9/2005	18:57:14	0	1:11:31	6.096	14.7
T	N43°29.5636'	W073°40.3158'	10/9/2005	18:57:53	0	1:12:10	6.255	14.7
T	N43°29.7017'	W073°40.2256'	10/9/2005	18:58:36	0	1:12:53	6.431	14.7
T	N43°29.8247'	W073°40.1391'	10/9/2005	18:59:15	0	1:13:32	6.59	14.7
T	N43°29.9428'	W073°40.0602'	10/9/2005	18:59:52	0	1:14:09	6.741	14.7
T	N43°30.0764'	W073°39.9739'	10/9/2005	19:00:34	0	1:14:51	6.911	14.6
T	N43°30.2022'	W073°39.8954'	10/9/2005	19:01:13	0	1:15:30	7.07	14.7
T	N43°30.3274'	W073°39.8143'	10/9/2005	19:01:52	0	1:16:09	7.229	14.7
T	N43°30.4507'	W073°39.7383'	10/9/2005	19:02:30	0	1:16:47	7.385	14.7
T	N43°30.5823'	W073°39.6556'	10/9/2005	19:03:11	0	1:17:28	7.551	14.6
T	N43°30.7236'	W073°39.5755'	10/9/2005	19:03:54	0	1:18:11	7.727	14.7
T	N43°30.8463'	W073°39.5111'	10/9/2005	19:04:31	0	1:18:48	7.878	14.7
T	N43°30.9625'	W073°39.4544'	10/9/2005	19:05:06	0	1:19:23	8.02	14.6
T	N43°31.0783'	W073°39.3955'	10/9/2005	19:05:41	0	1:19:58	8.163	14.6
T	N43°31.2251'	W073°39.3222'	10/9/2005	19:06:25	0	1:20:42	8.342	14.7
T	N43°31.3410'	W073°39.2623'	10/9/2005	19:07:00	0	1:21:17	8.485	14.7
T	N43°31.4713'	W073°39.1976'	10/9/2005	19:07:39	0	1:21:56	8.644	14.7
T	N43°31.6088'	W073°39.1284'	10/9/2005	19:08:20	0	1:22:37	8.813	14.8
T	N43°31.7520'	W073°39.0579'	10/9/2005	19:09:03	0	1:23:20	8.988	14.7
T	N43°31.8804'	W073°38.9932'	10/9/2005	19:09:42	0	1:23:59	9.145	14.5
T	N43°32.0201'	W073°38.9153'	10/9/2005	19:10:25	0	1:24:42	9.319	14.5
T	N43°32.1569'	W073°38.8403'	10/9/2005	19:11:07	0	1:25:24	9.488	14.5
T	N43°32.2699'	W073°38.7801'	10/9/2005	19:11:42	0	1:25:59	9.628	14.3
T	N43°32.4138'	W073°38.7254'	10/9/2005	19:12:25	0	1:26:42	9.8	14.4
T	N43°32.5280'	W073°38.6977'	10/9/2005	19:12:59	0	1:27:16	9.933	14.1
T	N43°32.6130'	W073°38.7039'	10/9/2005	19:13:25	0	1:27:42	10.031	13.6
T	N43°32.6899'	W073°38.7357'	10/9/2005	19:13:56	0	1:28:13	10.124	10.7
T	N43°32.7810'	W073°38.7824'	10/9/2005	19:14:30	0	1:28:47	10.236	11.8
T	N43°32.8837'	W073°38.8355'	10/9/2005	19:15:07	0	1:29:24	10.362	12.3
T	N43°32.9580'	W073°38.8374'	10/9/2005	19:15:33	0	1:29:50	10.448	11.9
T	N43°33.0549'	W073°38.7966'	10/9/2005	19:16:08	0	1:30:25	10.564	12
T	N43°33.1602'	W073°38.7125'	10/9/2005	19:16:50	0	1:31:07	10.704	12

T	N43°33.2413'	W073°38.6205'	10/9/2005	19:17:28	0	1:31:45	10.825	11.5
T	N43°33.3044'	W073°38.5162'	10/9/2005	19:17:58	0	1:32:15	10.939	13.6
T	N43°33.3909'	W073°38.3653'	10/9/2005	19:18:38	0	1:32:55	11.099	14.5
T	N43°33.4798'	W073°38.2021'	10/9/2005	19:19:20	0	1:33:37	11.27	14.6
T	N43°33.5805'	W073°38.0176'	10/9/2005	19:20:08	0	1:34:25	11.462	14.5
T	N43°33.6806'	W073°37.8442'	10/9/2005	19:20:54	0	1:35:11	11.647	14.5
T	N43°33.7785'	W073°37.6739'	10/9/2005	19:21:39	0	1:35:56	11.829	14.5
T	N43°33.8477'	W073°37.5513'	10/9/2005	19:22:11	0	1:36:28	11.958	14.6
T	N43°33.9494'	W073°37.3758'	10/9/2005	19:22:57	0	1:37:14	12.146	14.7
T	N43°34.0440'	W073°37.2152'	10/9/2005	19:23:40	0	1:37:57	12.319	14.5
T	N43°34.1283'	W073°37.0733'	10/9/2005	19:24:18	0	1:38:35	12.472	14.5
T	N43°34.2220'	W073°36.9130'	10/9/2005	19:25:01	0	1:39:18	12.644	14.4
T	N43°34.3031'	W073°36.7765'	10/9/2005	19:25:39	0	1:39:56	12.791	14
T	N43°34.3746'	W073°36.6600'	10/9/2005	19:26:18	0	1:40:35	12.918	11.8
T	N43°34.4608'	W073°36.4988'	10/9/2005	19:27:16	0	1:41:33	13.085	10.4
T	N43°34.5484'	W073°36.2693'	10/9/2005	19:28:34	0	1:42:51	13.302	10
T	N43°34.6279'	W073°36.0324'	10/9/2005	19:29:50	0	1:44:07	13.52	10.3
T	N43°34.6948'	W073°35.8067'	10/9/2005	19:31:02	0	1:45:19	13.723	10.2
T	N43°34.7611'	W073°35.6471'	10/9/2005	19:31:56	0	1:46:13	13.877	10.2
T	N43°34.8567'	W073°35.4611'	10/9/2005	19:33:06	0	1:47:23	14.067	9.8
T	N43°34.9159'	W073°35.3539'	10/9/2005	19:33:42	0	1:47:59	14.179	11.2
T	N43°34.9958'	W073°35.2203'	10/9/2005	19:34:24	0	1:48:41	14.324	12.4
T	N43°35.0534'	W073°35.1592'	10/9/2005	19:34:50	0	1:49:07	14.407	11.6
T	N43°35.1216'	W073°35.1382'	10/9/2005	19:35:16	0	1:49:33	14.488	11.1
T	N43°35.1805'	W073°35.1060'	10/9/2005	19:35:43	0	1:50:00	14.561	9.7
T	N43°35.1969'	W073°35.0571'	10/9/2005	19:36:02	0	1:50:19	14.606	8.5
T	N43°35.1844'	W073°35.0121'	10/9/2005	19:36:19	0	1:50:36	14.646	8.5
T	N43°35.1486'	W073°34.9853'	10/9/2005	19:36:37	0	1:50:54	14.693	9.4
T	N43°35.1007'	W073°34.9911'	10/9/2005	19:36:57	0	1:51:14	14.748	10
T	N43°35.0270'	W073°35.0259'	10/9/2005	19:37:24	0	1:51:41	14.838	12
T	N43°34.9111'	W073°35.0790'	10/9/2005	19:38:02	0	1:52:19	14.979	13.3
T	N43°34.7637'	W073°35.1395'	10/9/2005	19:38:46	0	1:53:03	15.156	14.5
T	N43°34.6324'	W073°35.2000'	10/9/2005	19:39:24	0	1:53:41	15.315	15.1
T	N43°34.5088'	W073°35.2747'	10/9/2005	19:40:01	0	1:54:18	15.471	15.1
T	N43°34.3485'	W073°35.3919'	10/9/2005	19:40:51	0	1:55:08	15.679	15
T	N43°34.2645'	W073°35.4852'	10/9/2005	19:41:21	0	1:55:38	15.804	14.9
T	N43°34.2252'	W073°35.5734'	10/9/2005	19:41:42	0	1:55:59	15.89	14.8
T	N43°34.2094'	W073°35.6848'	10/9/2005	19:42:05	0	1:56:22	15.985	14.8
T	N43°34.2040'	W073°35.8946'	10/9/2005	19:42:47	0	1:57:04	16.16	15
T	N43°34.1972'	W073°36.1186'	10/9/2005	19:43:32	0	1:57:49	16.347	15
T	N43°34.1721'	W073°36.3214'	10/9/2005	19:44:13	0	1:58:30	16.519	15.1
T	N43°34.1274'	W073°36.5165'	10/9/2005	19:44:54	0	1:59:11	16.689	15
T	N43°34.0836'	W073°36.6751'	10/9/2005	19:45:28	0	1:59:45	16.831	15
T	N43°34.0520'	W073°36.7991'	10/9/2005	19:45:56	0	2:00:13	16.94	14.1
T	N43°34.0199'	W073°36.8998'	10/9/2005	19:46:23	0	2:00:40	17.032	12.2
T	N43°33.9542'	W073°37.0228'	10/9/2005	19:47:02	0	2:01:19	17.16	11.8
T	N43°33.8918'	W073°37.0903'	10/9/2005	19:47:28	0	2:01:45	17.251	12.7
T	N43°33.7817'	W073°37.1695'	10/9/2005	19:48:04	0	2:02:21	17.394	14.3
T	N43°33.6404'	W073°37.2448'	10/9/2005	19:48:46	0	2:03:03	17.569	15
T	N43°33.4804'	W073°37.3073'	10/9/2005	19:49:32	0	2:03:49	17.76	15
T	N43°33.3253'	W073°37.3704'	10/9/2005	19:50:17	0	2:04:34	17.946	14.9
T	N43°33.1923'	W073°37.4354'	10/9/2005	19:50:56	0	2:05:13	18.109	15
T	N43°33.0729'	W073°37.4727'	10/9/2005	19:51:30	0	2:05:47	18.25	14.9
T	N43°32.9056'	W073°37.5059'	10/9/2005	19:52:17	0	2:06:34	18.444	14.9
T	N43°32.7353'	W073°37.5361'	10/9/2005	19:53:05	0	2:07:22	18.642	14.8
T	N43°32.6185'	W073°37.5706'	10/9/2005	19:53:38	0	2:07:55	18.78	15
T	N43°32.4652'	W073°37.6308'	10/9/2005	19:54:22	0	2:08:39	18.963	15

T	N43°32.3433'	W073°37.6729'	10/9/2005	19:54:57	0	2:09:14	19.108	14.9
T	N43°32.1891'	W073°37.7128'	10/9/2005	19:55:40	0	2:09:57	19.289	15.1
T	N43°32.0565'	W073°37.7576'	10/9/2005	19:56:18	0	2:10:35	19.446	14.9
T	N43°31.8927'	W073°37.8155'	10/9/2005	19:57:05	0	2:11:22	19.64	14.9
T	N43°31.7137'	W073°37.8747'	10/9/2005	19:57:56	0	2:12:13	19.852	15
T	N43°31.5322'	W073°37.9330'	10/9/2005	19:58:47	0	2:13:04	20.067	15.2
T	N43°31.3699'	W073°37.9803'	10/9/2005	19:59:32	0	2:13:49	20.258	15.3
T	N43°31.2354'	W073°38.0199'	10/9/2005	20:00:10	0	2:14:27	20.416	15
T	N43°31.1334'	W073°38.0553'	10/9/2005	20:00:40	0	2:14:57	20.538	14.5
T	N43°31.0011'	W073°38.1068'	10/9/2005	20:01:20	0	2:15:37	20.696	14.2
T	N43°30.8752'	W073°38.1570'	10/9/2005	20:01:59	0	2:16:16	20.847	13.9
T	N43°30.7246'	W073°38.2056'	10/9/2005	20:02:46	0	2:17:03	21.025	13.6
T	N43°30.5794'	W073°38.2455'	10/9/2005	20:03:31	0	2:17:48	21.195	13.6
T	N43°30.4439'	W073°38.2883'	10/9/2005	20:04:13	0	2:18:30	21.355	13.7
T	N43°30.2946'	W073°38.3366'	10/9/2005	20:05:00	0	2:19:17	21.532	13.5
T	N43°30.1523'	W073°38.3823'	10/9/2005	20:05:45	0	2:20:02	21.7	13.5
T	N43°30.0252'	W073°38.4238'	10/9/2005	20:06:25	0	2:20:42	21.851	13.5
T	N43°29.8832'	W073°38.4615'	10/9/2005	20:07:09	0	2:21:26	22.017	13.6
T	N43°29.7352'	W073°38.4982'	10/9/2005	20:07:55	0	2:22:12	22.19	13.6
T	N43°29.5891'	W073°38.5323'	10/9/2005	20:08:40	0	2:22:57	22.361	13.7
T	N43°29.4577'	W073°38.5603'	10/9/2005	20:09:21	0	2:23:38	22.514	13.4
T	N43°29.3219'	W073°38.5954'	10/9/2005	20:10:03	0	2:24:20	22.673	13.6
T	N43°29.1945'	W073°38.6350'	10/9/2005	20:10:43	0	2:25:00	22.824	13.5
T	N43°29.0335'	W073°38.6932'	10/9/2005	20:11:34	0	2:25:51	23.015	13.5
T	N43°28.8871'	W073°38.7647'	10/9/2005	20:12:22	0	2:26:39	23.194	13.4
T	N43°28.7735'	W073°38.8590'	10/9/2005	20:13:03	0	2:27:20	23.347	13.4
T	N43°28.7078'	W073°38.9565'	10/9/2005	20:13:33	0	2:27:50	23.458	13.3
T	N43°28.6589'	W073°39.0849'	10/9/2005	20:14:06	0	2:28:23	23.579	13.2
T	N43°28.5964'	W073°39.2713'	10/9/2005	20:14:53	0	2:29:10	23.751	13.1
T	N43°28.5398'	W073°39.4271'	10/9/2005	20:15:38	0	2:29:55	23.896	11.6
T	N43°28.4828'	W073°39.5510'	10/9/2005	20:16:23	0	2:30:40	24.019	9.8
T	N43°28.4329'	W073°39.6028'	10/9/2005	20:16:55	0	2:31:12	24.091	8.1
T	N43°28.3058'	W073°39.6820'	10/9/2005	20:18:09	0	2:32:26	24.252	7.8
T	N43°28.1986'	W073°39.7261'	10/9/2005	20:18:57	0	2:33:14	24.38	9.7
T	N43°28.0888'	W073°39.7541'	10/9/2005	20:19:37	0	2:33:54	24.509	11.6
T	N43°27.9797'	W073°39.7837'	10/9/2005	20:20:15	0	2:34:32	24.637	12.1
T	N43°27.8729'	W073°39.7995'	10/9/2005	20:20:52	0	2:35:09	24.761	12
T	N43°27.7551'	W073°39.8146'	10/9/2005	20:21:33	0	2:35:50	24.897	12
T	N43°27.6540'	W073°39.8285'	10/9/2005	20:22:08	0	2:36:25	25.014	12
T	N43°27.5388'	W073°39.8526'	10/9/2005	20:22:49	0	2:37:06	25.148	11.8
T	N43°27.4326'	W073°39.8761'	10/9/2005	20:23:26	0	2:37:43	25.272	12.1
T	N43°27.3350'	W073°39.9147'	10/9/2005	20:24:01	0	2:38:18	25.389	12
T	N43°27.2684'	W073°39.9749'	10/9/2005	20:24:29	0	2:38:46	25.481	11.8
T	N43°27.2147'	W073°40.0589'	10/9/2005	20:24:58	0	2:39:15	25.574	11.6
T	N43°27.1673'	W073°40.1568'	10/9/2005	20:25:28	0	2:39:45	25.673	11.8
T	N43°27.1207'	W073°40.2585'	10/9/2005	20:25:59	0	2:40:16	25.773	11.7
T	N43°27.0862'	W073°40.3521'	10/9/2005	20:26:26	0	2:40:43	25.861	11.7
T	N43°27.0492'	W073°40.4545'	10/9/2005	20:26:55	0	2:41:12	25.957	11.9
T	N43°26.9903'	W073°40.5971'	10/9/2005	20:27:36	0	2:41:53	26.094	12
T	N43°26.9449'	W073°40.6946'	10/9/2005	20:28:05	0	2:42:22	26.191	12
T	N43°26.8844'	W073°40.7870'	10/9/2005	20:28:36	0	2:42:53	26.295	12.1
T	N43°26.7985'	W073°40.8951'	10/9/2005	20:29:16	0	2:43:33	26.429	12.1
T	N43°26.7126'	W073°40.9820'	10/9/2005	20:29:53	0	2:44:10	26.551	11.9
T	N43°26.6321'	W073°41.0683'	10/9/2005	20:30:29	0	2:44:46	26.669	11.7
T	N43°26.5455'	W073°41.1513'	10/9/2005	20:31:07	0	2:45:24	26.79	11.5
T	N43°26.4055'	W073°41.2720'	10/9/2005	20:32:10	0	2:46:27	26.98	10.9
T	N43°26.2619'	W073°41.4107'	10/9/2005	20:33:18	0	2:47:35	27.182	10.7

T	N43°26.1573'	W073°41.5298'	10/9/2005	20:34:07	0	2:48:24	27.339	11.5
T	N43°26.0624'	W073°41.6476'	10/9/2005	20:34:52	0	2:49:09	27.486	11.8
T	N43°25.9845'	W073°41.7609'	10/9/2005	20:35:31	0	2:49:48	27.616	12
T	N43°25.8953'	W073°41.8939'	10/9/2005	20:36:16	0	2:50:33	27.768	12.1
T	N43°25.7994'	W073°42.0348'	10/9/2005	20:37:04	0	2:51:21	27.929	12.1
T	N43°25.7170'	W073°42.1562'	10/9/2005	20:37:49	0	2:52:06	28.068	11.1
T	N43°25.6314'	W073°42.2830'	10/9/2005	20:38:43	0	2:53:00	28.213	9.7
T	N43°25.5616'	W073°42.4301'	10/9/2005	20:39:42	0	2:53:59	28.36	9
T	N43°25.5046'	W073°42.5302'	10/9/2005	20:40:35	0	2:54:52	28.466	7.2
T	N43°25.4418'	W073°42.5794'	10/9/2005	20:41:20	0	2:55:37	28.549	6.7
T	N43°25.3746'	W073°42.5930'	10/9/2005	20:42:05	0	2:56:22	28.628	6.3
T	N43°25.3150'	W073°42.5868'	10/9/2005	20:42:58	0	2:57:15	28.697	4.7
T	N43°25.2796'	W073°42.5830'	10/9/2005	20:43:42	0	2:57:59	28.737	3.3
F	Latitude	Longitude	Date	Time	Symbol---	T	O	Comment
C	N43°25.2795'	W073°42.5829'	10/31/2005	16:18:31	-	-	Waypoint	+

APPENDIX B

Data Downloaded from the Garmin eTrex Legend.

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H SOFTWARE NAME & VERSION
I GPSU 4.15 REGISTERED to 'NTSB (RE-40)'
S DateFormat=M/d/YYYY
S Units=S,F
S SymbolSet=2

H R DATUM
M E           WGS 84 100  0.0000000E+00  0.0000000E+00 0 0 0

H COORDINATE SYSTEM
U LAT LON DM

F ID----- Latitude   Longitude   Symbol----- T O Alt(f) Comment
W 001      N40°39.5148' W074°02.9950' Waypoint    I E -12.2
W 002      N40°39.5392' W074°02.9740' Waypoint    I E -10.6
W 003      N40°39.6889' W074°02.8417' Waypoint    I E -5.1
W 004      N40°39.7620' W074°02.8176' Waypoint    I E -4.3
W 005      N40°39.8511' W074°02.7776' Waypoint    I E -4.3
W 006      N40°39.8845' W074°02.7702' Waypoint    I E -39.8
W 007      N40°39.9300' W074°02.7383' Waypoint    I E -46.9
W 008      N40°39.9964' W074°02.6803' Waypoint    I E -50.8
W 009      N40°40.0776' W074°02.6202' Waypoint    I E -41.4
W 010      N40°40.1516' W074°02.5768' Waypoint    I E -41.4
W 011      N40°40.2480' W074°02.5063' Waypoint    I E -41.4
W 012      N40°40.3543' W074°02.4357' Waypoint    I E #####
W 013      N40°40.3543' W074°02.4357' Waypoint    I E #####
W 014      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 015      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 016      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 017      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 018      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 019      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 020      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 021      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 022      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 023      N40°40.7602' W074°02.0460' Waypoint    I E #####
W 024      N40°41.7724' W074°01.1063' Waypoint    I E 70.6
W 025      N40°41.8256' W074°01.0111' Waypoint    I E 56.4
W 026      N40°41.8672' W074°00.9194' Waypoint    I E 52.5
W 027      N40°41.9129' W074°00.8482' Waypoint    I E 47.7
W 028      N40°41.9245' W074°00.8299' Waypoint    I E #####
W GARMIN   N38°51.3330' W094°47.9410' Waypoint    I E 1066.4
W GRMEUR   N50°58.9730' W001°27.8340' Waypoint    I E 117.9
W GRMPHX   N33°19.8114' W111°56.7666' Waypoint    I E 1184.7
W GRMTWN   N25°03.7070' E121°38.4160' Waypoint    I E 125.0

H TRACK SUMMARY
H Track          Pnts Date        Time       StopTime Duration miles mph Alt(f)
H 08-NOV-03      4 12/30/1989 23:59:59 23:59:59 0:00:00 7798.03 #####.# 927.7
H 08-NOV-03 02    1 12/30/1989 23:59:59 23:59:59 0:00:00 3.83 #####.# 44.6
H ACTIVE LOG      26 10/9/2005 17:49:36 18:02:39 0:13:03 0.75 3.5 388.4
H                   4 10/9/2005 18:03:00 18:04:16 0:01:16 0.01 0.6 358.4
H                   48 10/9/2005 18:24:37 18:50:51 0:26:14 3.87 8.9 442.0
H                   1 10/9/2005 18:51:57 18:52:14 0:00:17 0.06 13.5 364.7
H                   18 10/9/2005 18:53:36 19:00:44 0:07:08 1.69 14.2 380.5

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H	193	10/9/2005	19:01:12	20:43:46	1:42:34	21.68	12.7	377.3
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F	Latitude	Longitude	Alt(f)	Date	Time	S	Duration	miles	mph
T	N24°58.1996'	E121°33.0006'	927.7	12/30/1989	23:59:59	1	08-NOV-03		
T	N25°03.7189'	E121°38.4130'	134.5	12/30/1989	23:59:59	0	0:00:00	8.503	#####.#
T	N40°39.2442'	W074°03.2290'	3.6	12/30/1989	23:59:59	0	0:00:00	7794.175	#####.#
T	N40°41.9852'	W074°00.7378'	46.1	12/30/1989	23:59:59	0	0:00:00	7798.008	#####.#
T	N40°42.0058'	W074°00.7262'	44.6	12/30/1989	23:59:59	0	0:00:00	7798.034	#####.#
T	N40°39.2661'	W074°03.2097'	2.0	12/30/1989	23:59:59	1	08-NOV-03	02	
T	N40°42.0058'	W074°00.7262'	44.6	12/30/1989	23:59:59	0	0:00:00	3.829	#####.#
T	N43°25.1592'	W073°42.7249'	27.3	10/9/2005	17:49:36	1	ACTIVE LOG		
T	N43°25.1657'	W073°42.7622'	385.2	10/9/2005	17:51:11	0	0:01:35	0.032	1.2
T	N43°25.1670'	W073°42.7661'	382.1	10/9/2005	17:51:24	0	0:01:48	0.036	1.0
T	N43°25.1670'	W073°42.7635'	388.4	10/9/2005	17:58:18	0	0:08:42	0.038	0.0
T	N43°25.1670'	W073°42.7738'	385.2	10/9/2005	17:58:24	0	0:08:48	0.046	5.2
T	N43°25.1554'	W073°42.7906'	382.1	10/9/2005	17:58:29	0	0:08:53	0.066	13.9
T	N43°25.1489'	W073°42.8125'	382.1	10/9/2005	17:58:34	0	0:08:58	0.086	14.2
T	N43°25.1464'	W073°42.8137'	385.2	10/9/2005	17:58:43	0	0:09:07	0.089	1.3
T	N43°25.1515'	W073°42.8202'	385.2	10/9/2005	17:58:47	0	0:09:11	0.097	7.2
T	N43°25.2133'	W073°42.8395'	382.1	10/9/2005	17:58:56	0	0:09:20	0.170	29.2
T	N43°25.3060'	W073°42.8562'	382.1	10/9/2005	17:59:08	0	0:09:32	0.277	32.3
T	N43°25.3691'	W073°42.8446'	382.1	10/9/2005	17:59:22	0	0:09:46	0.351	18.8
T	N43°25.3421'	W073°42.8356'	369.5	10/9/2005	17:59:42	0	0:10:06	0.383	5.8
T	N43°25.3421'	W073°42.8369'	366.3	10/9/2005	18:00:22	0	0:10:46	0.384	0.1
T	N43°25.3575'	W073°42.8318'	366.3	10/9/2005	18:00:31	0	0:10:55	0.402	7.3
T	N43°25.3627'	W073°42.8228'	366.3	10/9/2005	18:00:34	0	0:10:58	0.412	11.5
T	N43°25.3549'	W073°42.7919'	366.3	10/9/2005	18:00:39	0	0:11:03	0.439	19.7
T	N43°25.3369'	W073°42.7584'	366.3	10/9/2005	18:00:44	0	0:11:08	0.474	25.1
T	N43°25.2494'	W073°42.6142'	364.7	10/9/2005	18:01:04	0	0:11:28	0.631	28.3
T	N43°25.2146'	W073°42.5588'	364.7	10/9/2005	18:01:15	0	0:11:39	0.692	20.0
T	N43°25.2172'	W073°42.5498'	360.0	10/9/2005	18:01:25	0	0:11:49	0.700	2.9
T	N43°25.2185'	W073°42.5524'	358.4	10/9/2005	18:01:32	0	0:11:56	0.703	1.3
T	N43°25.2236'	W073°42.5511'	358.4	10/9/2005	18:01:47	0	0:12:11	0.709	1.4
T	N43°25.2378'	W073°42.5447'	363.2	10/9/2005	18:02:00	0	0:12:24	0.726	4.8
T	N43°25.2391'	W073°42.5447'	363.2	10/9/2005	18:02:01	0	0:12:25	0.728	5.3
T	N43°25.2558'	W073°42.5563'	363.2	10/9/2005	18:02:10	0	0:12:34	0.749	8.6
T	N43°25.2584'	W073°42.5614'	363.2	10/9/2005	18:02:39	0	0:13:03	0.754	0.6
T	N43°25.2712'	W073°42.5743'	358.4	10/9/2005	18:03:00	1			
T	N43°25.2674'	W073°42.5666'	342.7	10/9/2005	18:03:35	0	0:00:35	0.008	0.8
T	N43°25.2674'	W073°42.5678'	345.8	10/9/2005	18:03:53	0	0:00:53	0.009	0.2
T	N43°25.2661'	W073°42.5730'	341.1	10/9/2005	18:04:12	0	0:01:12	0.013	0.9
T	N43°25.2661'	W073°42.5730'	344.2	10/9/2005	18:04:16	0	0:01:16	0.013	0.0
T	N43°25.2622'	W073°42.5820'	442.0	10/9/2005	18:24:37	1			
T	N43°25.2597'	W073°42.5807'	371.0	10/9/2005	18:30:06	0	0:05:29	0.003	0.0
T	N43°25.2635'	W073°42.5807'	375.8	10/9/2005	18:31:32	0	0:06:55	0.008	0.2
T	N43°25.2738'	W073°42.5769'	372.6	10/9/2005	18:32:03	0	0:07:26	0.020	1.4
T	N43°25.2957'	W073°42.5756'	361.6	10/9/2005	18:32:28	0	0:07:51	0.045	3.6
T	N43°25.3009'	W073°42.5769'	360.0	10/9/2005	18:32:33	0	0:07:56	0.051	4.3
T	N43°25.3124'	W073°42.5820'	356.8	10/9/2005	18:32:46	0	0:08:09	0.065	3.9
T	N43°25.3176'	W073°42.5820'	358.4	10/9/2005	18:32:51	0	0:08:14	0.071	4.3
T	N43°25.3395'	W073°42.5975'	356.8	10/9/2005	18:33:13	0	0:08:36	0.099	4.6
T	N43°25.3472'	W073°42.6039'	358.4	10/9/2005	18:33:34	0	0:08:57	0.110	1.8
T	N43°25.3446'	W073°42.6000'	358.4	10/9/2005	18:33:41	0	0:09:04	0.114	2.3
T	N43°25.3369'	W073°42.5563'	352.1	10/9/2005	18:34:06	0	0:09:29	0.152	5.4
T	N43°25.3408'	W073°42.4983'	358.4	10/9/2005	18:34:29	0	0:09:52	0.201	7.6
T	N43°25.3536'	W073°42.4417'	361.6	10/9/2005	18:34:50	0	0:10:13	0.250	8.5
T	N43°25.3768'	W073°42.3812'	364.7	10/9/2005	18:35:14	0	0:10:37	0.307	8.6
T	N43°25.4180'	W073°42.3001'	363.2	10/9/2005	18:35:48	0	0:11:11	0.390	8.8
T	N43°25.4811'	W073°42.2125'	352.1	10/9/2005	18:36:31	0	0:11:54	0.493	8.6
T	N43°25.5326'	W073°42.1597'	339.5	10/9/2005	18:37:00	0	0:12:23	0.567	9.2
T	N43°25.5854'	W073°42.1095'	364.7	10/9/2005	18:37:26	0	0:12:49	0.641	10.2
T	N43°25.6356'	W073°42.0644'	364.7	10/9/2005	18:37:48	0	0:13:11	0.710	11.3
T	N43°25.6974'	W073°42.0232'	339.5	10/9/2005	18:38:11	0	0:13:34	0.789	12.4
T	N43°25.7785'	W073°41.9717'	344.2	10/9/2005	18:38:39	0	0:14:02	0.892	13.2
T	N43°25.8429'	W073°41.9344'	350.5	10/9/2005	18:39:00	0	0:14:23	0.973	13.8
T	N43°25.9060'	W073°41.8984'	350.5	10/9/2005	18:39:20	0	0:14:43	1.051	14.2
T	N43°25.9974'	W073°41.8417'	371.0	10/9/2005	18:39:48	0	0:15:11	1.167	14.8
T	N43°26.0811'	W073°41.7941'	369.5	10/9/2005	18:40:14	0	0:15:37	1.271	14.4

T N43°26.1506'	W073°41.7529'	372.6	10/9/2005	18:40:35	0	0:15:58	1.358	14.9
T N43°26.2420'	W073°41.7014'	374.2	10/9/2005	18:41:03	0	0:16:26	1.472	14.6
T N43°26.3682'	W073°41.6344'	375.8	10/9/2005	18:41:41	0	0:17:04	1.627	14.8
T N43°26.4789'	W073°41.5713'	372.6	10/9/2005	18:42:15	0	0:17:38	1.765	14.6
T N43°26.5754'	W073°41.5121'	366.3	10/9/2005	18:42:45	0	0:18:08	1.887	14.6
T N43°26.6656'	W073°41.4581'	367.9	10/9/2005	18:43:12	0	0:18:35	2.000	15.1
T N43°26.7467'	W073°41.4078'	375.8	10/9/2005	18:43:37	0	0:19:00	2.103	14.7
T N43°26.8819'	W073°41.3293'	369.5	10/9/2005	18:44:19	0	0:19:42	2.272	14.5
T N43°27.0261'	W073°41.2392'	345.8	10/9/2005	18:45:04	0	0:20:27	2.454	14.6
T N43°27.1162'	W073°41.1709'	337.9	10/9/2005	18:45:32	0	0:20:55	2.572	15.2
T N43°27.2011'	W073°41.1220'	350.5	10/9/2005	18:45:58	0	0:21:21	2.679	14.7
T N43°27.2874'	W073°41.0757'	366.3	10/9/2005	18:46:24	0	0:21:47	2.785	14.8
T N43°27.3518'	W073°41.0396'	369.5	10/9/2005	18:46:44	0	0:22:07	2.865	14.4
T N43°27.4265'	W073°40.9997'	360.0	10/9/2005	18:47:07	0	0:22:30	2.957	14.4
T N43°27.5204'	W073°40.9495'	356.8	10/9/2005	18:47:36	0	0:22:59	3.074	14.4
T N43°27.6067'	W073°40.9070'	356.8	10/9/2005	18:48:02	0	0:23:25	3.179	14.6
T N43°27.6994'	W073°40.8607'	350.5	10/9/2005	18:48:30	0	0:23:53	3.293	14.6
T N43°27.8204'	W073°40.8130'	361.6	10/9/2005	18:49:05	0	0:24:28	3.437	14.9
T N43°27.8925'	W073°40.7873'	352.1	10/9/2005	18:49:26	0	0:24:49	3.523	14.7
T N43°27.9685'	W073°40.7577'	352.1	10/9/2005	18:49:48	0	0:25:11	3.614	14.9
T N43°28.0393'	W073°40.7255'	356.8	10/9/2005	18:50:09	0	0:25:32	3.700	14.7
T N43°28.1037'	W073°40.7036'	360.0	10/9/2005	18:50:28	0	0:25:51	3.776	14.5
T N43°28.1848'	W073°40.6804'	358.4	10/9/2005	18:50:51	0	0:26:14	3.872	14.9
T N43°28.4229'	W073°40.6676'	358.4	10/9/2005	18:51:57	1			
T N43°28.4783'	W073°40.6727'	364.7	10/9/2005	18:52:14	0	0:00:17	0.064	13.5
T N43°28.7706'	W073°40.7100'	361.6	10/9/2005	18:53:36	1			
T N43°28.7873'	W073°40.7100'	360.0	10/9/2005	18:53:41	0	0:00:05	0.019	13.9
T N43°28.8839'	W073°40.7178'	380.5	10/9/2005	18:54:09	0	0:00:33	0.131	14.3
T N43°28.9083'	W073°40.7203'	380.5	10/9/2005	18:54:16	0	0:00:40	0.159	14.5
T N43°28.9688'	W073°40.7190'	356.8	10/9/2005	18:54:39	0	0:01:03	0.229	10.9
T N43°29.0422'	W073°40.7049'	360.0	10/9/2005	18:55:05	0	0:01:29	0.314	11.8
T N43°29.1130'	W073°40.6444'	349.0	10/9/2005	18:55:30	0	0:01:54	0.410	13.8
T N43°29.1825'	W073°40.5839'	350.5	10/9/2005	18:55:53	0	0:02:17	0.505	14.8
T N43°29.2662'	W073°40.5182'	355.3	10/9/2005	18:56:20	0	0:02:44	0.615	14.8
T N43°29.3538'	W073°40.4590'	360.0	10/9/2005	18:56:47	0	0:03:11	0.728	15.0
T N43°29.4375'	W073°40.4023'	361.6	10/9/2005	18:57:13	0	0:03:37	0.835	14.9
T N43°29.5353'	W073°40.3341'	355.3	10/9/2005	18:57:44	0	0:04:08	0.961	14.7
T N43°29.6126'	W073°40.2826'	364.7	10/9/2005	18:58:08	0	0:04:32	1.060	14.8
T N43°29.6653'	W073°40.2491'	366.3	10/9/2005	18:58:24	0	0:04:48	1.127	15.1
T N43°29.7181'	W073°40.2157'	366.3	10/9/2005	18:58:40	0	0:05:04	1.194	15.1
T N43°29.7954'	W073°40.1616'	356.8	10/9/2005	18:59:05	0	0:05:29	1.294	14.4
T N43°29.9087'	W073°40.0818'	369.5	10/9/2005	18:59:41	0	0:06:05	1.440	14.7
T N43°29.9962'	W073°40.0264'	364.7	10/9/2005	19:00:09	0	0:06:33	1.551	14.3
T N43°30.1082'	W073°39.9556'	356.8	10/9/2005	19:00:44	0	0:07:08	1.693	14.6
T N43°30.2061'	W073°39.8951'	356.8	10/9/2005	19:01:12	1			
T N43°30.2975'	W073°39.8423'	356.8	10/9/2005	19:01:38	0	0:00:26	0.114	15.8
T N43°30.4146'	W073°39.7560'	339.5	10/9/2005	19:02:17	0	0:01:05	0.267	14.1
T N43°30.5318'	W073°39.6814'	342.7	10/9/2005	19:02:55	0	0:01:43	0.416	14.1
T N43°30.6039'	W073°39.6389'	345.8	10/9/2005	19:03:17	0	0:02:05	0.506	14.8
T N43°30.6889'	W073°39.5925'	352.1	10/9/2005	19:03:43	0	0:02:31	0.611	14.6
T N43°30.7623'	W073°39.5552'	353.7	10/9/2005	19:04:06	0	0:02:54	0.701	14.1
T N43°30.8485'	W073°39.5114'	360.0	10/9/2005	19:04:32	0	0:03:20	0.807	14.7
T N43°30.8717'	W073°39.4985'	356.8	10/9/2005	19:04:39	0	0:03:27	0.836	14.8
T N43°30.9464'	W073°39.4638'	345.8	10/9/2005	19:05:01	0	0:03:49	0.927	14.9
T N43°31.0120'	W073°39.4290'	349.0	10/9/2005	19:05:21	0	0:04:09	1.008	14.6
T N43°31.0725'	W073°39.3955'	344.2	10/9/2005	19:05:40	0	0:04:28	1.083	14.2
T N43°31.1511'	W073°39.3608'	353.7	10/9/2005	19:06:03	0	0:04:51	1.178	14.9
T N43°31.2270'	W073°39.3234'	345.8	10/9/2005	19:06:26	0	0:05:14	1.271	14.5
T N43°31.2901'	W073°39.2874'	337.9	10/9/2005	19:06:45	0	0:05:33	1.349	14.9
T N43°31.3545'	W073°39.2565'	333.2	10/9/2005	19:07:04	0	0:05:52	1.428	14.9
T N43°31.4897'	W073°39.2076'	328.5	10/9/2005	19:07:46	0	0:06:34	1.589	13.8
T N43°31.5862'	W073°39.1535'	323.7	10/9/2005	19:08:14	0	0:07:02	1.709	15.4
T N43°31.6867'	W073°39.0956'	326.9	10/9/2005	19:08:44	0	0:07:32	1.834	15.0
T N43°31.7034'	W073°39.0865'	331.6	10/9/2005	19:08:49	0	0:07:37	1.855	14.9
T N43°31.7819'	W073°39.0505'	337.9	10/9/2005	19:09:12	0	0:08:00	1.950	14.9
T N43°31.9055'	W073°38.9939'	342.7	10/9/2005	19:09:49	0	0:08:37	2.100	14.6
T N43°31.9776'	W073°38.9488'	341.1	10/9/2005	19:10:12	0	0:09:00	2.191	14.3
T N43°32.0484'	W073°38.9063'	344.2	10/9/2005	19:10:34	0	0:09:22	2.280	14.6

T N43°32.1257'	W073°38.8612'	339.5	10/9/2005	19:10:58	0	0:09:46	2.377	14.5
T N43°32.1952'	W073°38.8175'	328.5	10/9/2005	19:11:20	0	0:10:08	2.465	14.4
T N43°32.2815'	W073°38.7763'	334.8	10/9/2005	19:11:46	0	0:10:34	2.570	14.6
T N43°32.3433'	W073°38.7505'	339.5	10/9/2005	19:12:04	0	0:10:52	2.644	14.9
T N43°32.4166'	W073°38.7222'	337.9	10/9/2005	19:12:26	0	0:11:14	2.732	14.4
T N43°32.4669'	W073°38.7080'	342.7	10/9/2005	19:12:41	0	0:11:29	2.791	14.2
T N43°32.5441'	W073°38.6952'	347.4	10/9/2005	19:13:04	0	0:11:52	2.880	14.0
T N43°32.6188'	W073°38.6977'	350.5	10/9/2005	19:13:26	0	0:12:14	2.967	14.1
T N43°32.6793'	W073°38.7286'	336.3	10/9/2005	19:13:51	0	0:12:39	3.041	10.7
T N43°32.7437'	W073°38.7621'	334.8	10/9/2005	19:14:16	0	0:13:04	3.120	11.4
T N43°32.7810'	W073°38.7814'	334.8	10/9/2005	19:14:30	0	0:13:18	3.166	11.8
T N43°32.8351'	W073°38.8162'	337.9	10/9/2005	19:14:50	0	0:13:38	3.235	12.4
T N43°32.8930'	W073°38.8394'	341.1	10/9/2005	19:15:10	0	0:13:58	3.304	12.5
T N43°32.9625'	W073°38.8394'	350.5	10/9/2005	19:15:34	0	0:14:22	3.384	12.0
T N43°33.0462'	W073°38.8072'	337.9	10/9/2005	19:16:04	0	0:14:52	3.484	12.0
T N43°33.1376'	W073°38.7389'	342.7	10/9/2005	19:16:40	0	0:15:28	3.604	12.0
T N43°33.1865'	W073°38.6926'	347.4	10/9/2005	19:17:00	0	0:15:48	3.672	12.3
T N43°33.2265'	W073°38.6450'	347.4	10/9/2005	19:17:20	0	0:16:08	3.733	10.9
T N43°33.2780'	W073°38.5690'	355.3	10/9/2005	19:17:44	0	0:16:32	3.820	13.0
T N43°33.3217'	W073°38.4917'	347.4	10/9/2005	19:18:05	0	0:16:53	3.902	14.0
T N43°33.3835'	W073°38.3823'	342.7	10/9/2005	19:18:34	0	0:17:22	4.017	14.4
T N43°33.4209'	W073°38.3102'	349.0	10/9/2005	19:18:52	0	0:17:40	4.091	14.8
T N43°33.4968'	W073°38.1737'	345.8	10/9/2005	19:19:28	0	0:18:16	4.235	14.4
T N43°33.5432'	W073°38.0875'	347.4	10/9/2005	19:19:50	0	0:18:38	4.325	14.7
T N43°33.5947'	W073°37.9909'	345.8	10/9/2005	19:20:15	0	0:19:03	4.425	14.4
T N43°33.6500'	W073°37.8982'	347.4	10/9/2005	19:20:40	0	0:19:28	4.525	14.4
T N43°33.6990'	W073°37.8107'	353.7	10/9/2005	19:21:03	0	0:19:51	4.617	14.4
T N43°33.7492'	W073°37.7283'	355.3	10/9/2005	19:21:25	0	0:20:13	4.707	14.7
T N43°33.8032'	W073°37.6304'	358.4	10/9/2005	19:21:50	0	0:20:38	4.810	14.8
T N43°33.8483'	W073°37.5506'	347.4	10/9/2005	19:22:11	0	0:20:59	4.894	14.5
T N43°33.8805'	W073°37.4914'	345.8	10/9/2005	19:22:26	0	0:21:14	4.956	14.8
T N43°33.9371'	W073°37.3974'	341.1	10/9/2005	19:22:51	0	0:21:39	5.058	14.7
T N43°33.9899'	W073°37.3073'	344.2	10/9/2005	19:23:15	0	0:22:03	5.155	14.5
T N43°34.0273'	W073°37.2390'	349.0	10/9/2005	19:23:33	0	0:22:21	5.226	14.3
T N43°34.0710'	W073°37.1644'	342.7	10/9/2005	19:23:53	0	0:22:41	5.306	14.4
T N43°34.1431'	W073°37.0459'	345.8	10/9/2005	19:24:25	0	0:23:13	5.435	14.5
T N43°34.2255'	W073°36.9043'	347.4	10/9/2005	19:25:03	0	0:23:51	5.587	14.4
T N43°34.3002'	W073°36.7781'	341.1	10/9/2005	19:25:38	0	0:24:26	5.723	14.0
T N43°34.3710'	W073°36.6623'	333.2	10/9/2005	19:26:16	0	0:25:04	5.849	12.0
T N43°34.4392'	W073°36.5464'	326.9	10/9/2005	19:26:58	0	0:25:46	5.974	10.7
T N43°34.4933'	W073°36.4189'	314.3	10/9/2005	19:27:41	0	0:26:29	6.097	10.3
T N43°34.5487'	W073°36.2709'	322.2	10/9/2005	19:28:31	0	0:27:19	6.236	10.0
T N43°34.6002'	W073°36.1215'	331.6	10/9/2005	19:29:21	0	0:28:09	6.374	9.9
T N43°34.6401'	W073°35.9941'	333.2	10/9/2005	19:30:02	0	0:28:50	6.490	10.2
T N43°34.6787'	W073°35.8602'	334.8	10/9/2005	19:30:45	0	0:29:33	6.610	10.1
T N43°34.7276'	W073°35.7263'	328.5	10/9/2005	19:31:28	0	0:30:16	6.735	10.5
T N43°34.7817'	W073°35.6014'	328.5	10/9/2005	19:32:11	0	0:30:59	6.856	10.2
T N43°34.8487'	W073°35.4765'	326.9	10/9/2005	19:32:59	0	0:31:47	6.986	9.7
T N43°34.9027'	W073°35.3761'	330.0	10/9/2005	19:33:34	0	0:32:22	7.090	10.7
T N43°34.9710'	W073°35.2576'	328.5	10/9/2005	19:34:11	0	0:32:59	7.217	12.3
T N43°35.0405'	W073°35.1675'	328.5	10/9/2005	19:34:44	0	0:33:32	7.326	12.0
T N43°35.0984'	W073°35.1418'	334.8	10/9/2005	19:35:07	0	0:33:55	7.397	11.0
T N43°35.1680'	W073°35.1186'	336.3	10/9/2005	19:35:36	0	0:34:24	7.479	10.2
T N43°35.1963'	W073°35.0735'	337.9	10/9/2005	19:35:56	0	0:34:44	7.529	9.0
T N43°35.1911'	W073°35.0246'	339.5	10/9/2005	19:36:13	0	0:35:01	7.570	8.7
T N43°35.1615'	W073°34.9899'	339.5	10/9/2005	19:36:31	0	0:35:19	7.615	9.0
T N43°35.1177'	W073°34.9834'	345.8	10/9/2005	19:36:50	0	0:35:38	7.665	9.6
T N43°35.0469'	W073°35.0130'	350.5	10/9/2005	19:37:17	0	0:36:05	7.751	11.4
T N43°34.9452'	W073°35.0619'	352.1	10/9/2005	19:37:51	0	0:36:39	7.875	13.1
T N43°34.8345'	W073°35.1070'	356.8	10/9/2005	19:38:25	0	0:37:13	8.007	14.1
T N43°34.7663'	W073°35.1353'	352.1	10/9/2005	19:38:45	0	0:37:33	8.090	14.8
T N43°34.6942'	W073°35.1675'	349.0	10/9/2005	19:39:06	0	0:37:54	8.177	15.0
T N43°34.5680'	W073°35.2409'	350.5	10/9/2005	19:39:44	0	0:38:32	8.334	14.9
T N43°34.4135'	W073°35.3413'	339.5	10/9/2005	19:40:31	0	0:39:19	8.531	15.1
T N43°34.2989'	W073°35.4443'	350.5	10/9/2005	19:41:09	0	0:39:57	8.689	14.9
T N43°34.2423'	W073°35.5332'	353.7	10/9/2005	19:41:33	0	0:40:21	8.787	14.8
T N43°34.2178'	W073°35.6323'	345.8	10/9/2005	19:41:54	0	0:40:42	8.875	15.0
T N43°34.2062'	W073°35.7945'	341.1	10/9/2005	19:42:27	0	0:41:15	9.011	14.8

T N43°34.2024'	W073°35.9941'	342.7	10/9/2005	19:43:07	0	0:41:55	9.177	15.0
T N43°34.1908'	W073°36.1949'	347.4	10/9/2005	19:43:47	0	0:42:35	9.345	15.1
T N43°34.1676'	W073°36.3455'	345.8	10/9/2005	19:44:18	0	0:43:06	9.474	14.9
T N43°34.1264'	W073°36.5309'	339.5	10/9/2005	19:44:57	0	0:43:45	9.636	14.9
T N43°34.0839'	W073°36.6829'	336.3	10/9/2005	19:45:30	0	0:44:18	9.771	14.8
T N43°34.0543'	W073°36.8026'	339.5	10/9/2005	19:45:57	0	0:44:45	9.877	14.1
T N43°34.0221'	W073°36.9030'	333.2	10/9/2005	19:46:24	0	0:45:12	9.969	12.2
T N43°33.9577'	W073°37.0228'	334.8	10/9/2005	19:47:02	0	0:45:50	10.093	11.8
T N43°33.8934'	W073°37.0910'	341.1	10/9/2005	19:47:28	0	0:46:16	10.187	12.9
T N43°33.7801'	W073°37.1721'	337.9	10/9/2005	19:48:05	0	0:46:53	10.334	14.3
T N43°33.6346'	W073°37.2468'	341.1	10/9/2005	19:48:48	0	0:47:36	10.512	15.0
T N43°33.4827'	W073°37.3060'	344.2	10/9/2005	19:49:32	0	0:48:20	10.694	14.9
T N43°33.3243'	W073°37.3717'	350.5	10/9/2005	19:50:18	0	0:49:06	10.884	14.9
T N43°33.1840'	W073°37.4399'	344.2	10/9/2005	19:50:59	0	0:49:47	11.056	15.0
T N43°33.0668'	W073°37.4746'	349.0	10/9/2005	19:51:32	0	0:50:20	11.194	15.1
T N43°32.8969'	W073°37.5068'	349.0	10/9/2005	19:52:20	0	0:51:08	11.391	14.8
T N43°32.7334'	W073°37.5352'	345.8	10/9/2005	19:53:06	0	0:51:54	11.581	14.9
T N43°32.6162'	W073°37.5712'	349.0	10/9/2005	19:53:39	0	0:52:27	11.719	15.1
T N43°32.4604'	W073°37.6343'	350.5	10/9/2005	19:54:24	0	0:53:12	11.906	15.0
T N43°32.3394'	W073°37.6755'	358.4	10/9/2005	19:54:59	0	0:53:47	12.050	14.8
T N43°32.1733'	W073°37.7193'	364.7	10/9/2005	19:55:46	0	0:54:34	12.245	14.9
T N43°32.0356'	W073°37.7669'	350.5	10/9/2005	19:56:25	0	0:55:13	12.408	15.1
T N43°31.8746'	W073°37.8236'	347.4	10/9/2005	19:57:11	0	0:55:59	12.599	15.0
T N43°31.6982'	W073°37.8802'	352.1	10/9/2005	19:58:01	0	0:56:49	12.808	15.0
T N43°31.5193'	W073°37.9368'	350.5	10/9/2005	19:58:51	0	0:57:39	13.019	15.2
T N43°31.3545'	W073°37.9858'	352.1	10/9/2005	19:59:37	0	0:58:25	13.213	15.2
T N43°31.2245'	W073°38.0231'	356.8	10/9/2005	20:00:14	0	0:59:02	13.366	14.9
T N43°31.1266'	W073°38.0604'	356.8	10/9/2005	20:00:43	0	0:59:31	13.483	14.5
T N43°30.9811'	W073°38.1158'	352.1	10/9/2005	20:01:27	0	1:00:15	13.657	14.2
T N43°30.8382'	W073°38.1699'	347.4	10/9/2005	20:02:11	0	1:00:59	13.828	14.0
T N43°30.7133'	W073°38.2098'	347.4	10/9/2005	20:02:50	0	1:01:38	13.975	13.6
T N43°30.5859'	W073°38.2446'	347.4	10/9/2005	20:03:29	0	1:02:17	14.125	13.8
T N43°30.4610'	W073°38.2832'	345.8	10/9/2005	20:04:08	0	1:02:56	14.272	13.6
T N43°30.3078'	W073°38.3321'	345.8	10/9/2005	20:04:56	0	1:03:44	14.453	13.6
T N43°30.1597'	W073°38.3797'	341.1	10/9/2005	20:05:43	0	1:04:31	14.629	13.4
T N43°30.0361'	W073°38.4222'	344.2	10/9/2005	20:06:22	0	1:05:10	14.775	13.5
T N43°29.9138'	W073°38.4544'	342.7	10/9/2005	20:07:00	0	1:05:48	14.919	13.6
T N43°29.7915'	W073°38.4866'	342.7	10/9/2005	20:07:38	0	1:06:26	15.062	13.6
T N43°29.6679'	W073°38.5162'	345.8	10/9/2005	20:08:16	0	1:07:04	15.207	13.7
T N43°29.5430'	W073°38.5420'	326.9	10/9/2005	20:08:55	0	1:07:43	15.352	13.4
T N43°29.4091'	W073°38.5754'	347.4	10/9/2005	20:09:36	0	1:08:24	15.509	13.8
T N43°29.2740'	W073°38.6141'	366.3	10/9/2005	20:10:19	0	1:09:07	15.668	13.3
T N43°29.1478'	W073°38.6553'	367.9	10/9/2005	20:10:59	0	1:09:47	15.817	13.4
T N43°29.0049'	W073°38.7093'	367.9	10/9/2005	20:11:44	0	1:10:32	15.988	13.7
T N43°28.8993'	W073°38.7608'	356.8	10/9/2005	20:12:18	0	1:11:06	16.117	13.7
T N43°28.8105'	W073°38.8252'	356.8	10/9/2005	20:12:49	0	1:11:37	16.232	13.4
T N43°28.7358'	W073°38.9102'	352.1	10/9/2005	20:13:19	0	1:12:07	16.344	13.4
T N43°28.6856'	W073°39.0145'	358.4	10/9/2005	20:13:47	0	1:12:35	16.448	13.4
T N43°28.6380'	W073°39.1561'	364.7	10/9/2005	20:14:23	0	1:13:11	16.579	13.0
T N43°28.5839'	W073°39.3119'	375.8	10/9/2005	20:15:03	0	1:13:51	16.723	13.0
T N43°28.5324'	W073°39.4445'	372.6	10/9/2005	20:15:43	0	1:14:31	16.849	11.3
T N43°28.4835'	W073°39.5462'	364.7	10/9/2005	20:16:21	0	1:15:09	16.951	9.7
T N43°28.4435'	W073°39.5951'	350.5	10/9/2005	20:16:48	0	1:15:36	17.012	8.2
T N43°28.3689'	W073°39.6466'	349.0	10/9/2005	20:17:33	0	1:16:21	17.108	7.7
T N43°28.2968'	W073°39.6865'	360.0	10/9/2005	20:18:13	0	1:17:01	17.198	8.1
T N43°28.2015'	W073°39.7251'	345.8	10/9/2005	20:18:56	0	1:17:44	17.312	9.6
T N43°28.1191'	W073°39.7444'	353.7	10/9/2005	20:19:27	0	1:18:15	17.408	11.2
T N43°28.0071'	W073°39.7766'	353.7	10/9/2005	20:20:06	0	1:18:54	17.540	12.2
T N43°27.9183'	W073°39.7934'	367.9	10/9/2005	20:20:37	0	1:19:25	17.643	12.0
T N43°27.8243'	W073°39.8062'	372.6	10/9/2005	20:21:10	0	1:19:58	17.752	11.9
T N43°27.7148'	W073°39.8217'	371.0	10/9/2005	20:21:48	0	1:20:36	17.879	12.0
T N43°27.5887'	W073°39.8423'	372.6	10/9/2005	20:22:32	0	1:21:20	18.025	12.0
T N43°27.4921'	W073°39.8655'	358.4	10/9/2005	20:23:06	0	1:21:54	18.138	12.0
T N43°27.3840'	W073°39.8925'	355.3	10/9/2005	20:23:44	0	1:22:32	18.265	12.0
T N43°27.3029'	W073°39.9388'	360.0	10/9/2005	20:24:14	0	1:23:02	18.366	12.1
T N43°27.2436'	W073°40.0071'	347.4	10/9/2005	20:24:41	0	1:23:29	18.455	11.9
T N43°27.1947'	W073°40.0946'	336.3	10/9/2005	20:25:09	0	1:23:57	18.547	11.9
T N43°27.1509'	W073°40.1899'	337.9	10/9/2005	20:25:38	0	1:24:26	18.641	11.7

T	N43°27.1149'	W073°40.2646'	333.2	10/9/2005	20:26:01	0	1:24:49	18.716	11.7
T	N43°27.0840'	W073°40.3483'	331.6	10/9/2005	20:26:25	0	1:25:13	18.795	11.8
T	N43°27.0479'	W073°40.4551'	331.6	10/9/2005	20:26:55	0	1:25:43	18.893	11.8
T	N43°26.9964'	W073°40.5749'	328.5	10/9/2005	20:27:30	0	1:26:18	19.009	12.0
T	N43°26.9630'	W073°40.6508'	328.5	10/9/2005	20:27:52	0	1:26:40	19.084	12.2
T	N43°26.9269'	W073°40.7190'	331.6	10/9/2005	20:28:13	0	1:27:01	19.154	12.1
T	N43°26.8741'	W073°40.7963'	333.2	10/9/2005	20:28:39	0	1:27:27	19.243	12.3
T	N43°26.7969'	W073°40.8954'	331.6	10/9/2005	20:29:16	0	1:28:04	19.365	11.8
T	N43°26.7261'	W073°40.9662'	328.5	10/9/2005	20:29:46	0	1:28:34	19.465	12.1
T	N43°26.6527'	W073°41.0461'	322.2	10/9/2005	20:30:18	0	1:29:06	19.573	12.1
T	N43°26.5664'	W073°41.1349'	328.5	10/9/2005	20:30:57	0	1:29:45	19.697	11.4
T	N43°26.4776'	W073°41.2083'	330.0	10/9/2005	20:31:36	0	1:30:24	19.816	11.0
T	N43°26.4003'	W073°41.2739'	326.9	10/9/2005	20:32:11	0	1:30:59	19.921	10.8
T	N43°26.3179'	W073°41.3486'	341.1	10/9/2005	20:32:50	0	1:31:38	20.034	10.5
T	N43°26.2471'	W073°41.4207'	319.0	10/9/2005	20:33:23	0	1:32:11	20.136	11.1
T	N43°26.1828'	W073°41.4941'	339.5	10/9/2005	20:33:53	0	1:32:41	20.232	11.5
T	N43°26.1313'	W073°41.5585'	366.3	10/9/2005	20:34:18	0	1:33:06	20.312	11.5
T	N43°26.0592'	W073°41.6512'	377.3	10/9/2005	20:34:53	0	1:33:41	20.426	11.7
T	N43°25.9832'	W073°41.7593'	367.9	10/9/2005	20:35:31	0	1:34:19	20.552	11.9
T	N43°25.8995'	W073°41.8855'	360.0	10/9/2005	20:36:14	0	1:35:02	20.695	12.0
T	N43°25.8133'	W073°42.0117'	361.6	10/9/2005	20:36:57	0	1:35:45	20.839	12.1
T	N43°25.7334'	W073°42.1288'	350.5	10/9/2005	20:37:39	0	1:36:27	20.974	11.5
T	N43°25.6562'	W073°42.2370'	350.5	10/9/2005	20:38:25	0	1:37:13	21.101	9.9
T	N43°25.5995'	W073°42.3425'	344.2	10/9/2005	20:39:07	0	1:37:55	21.210	9.4
T	N43°25.5532'	W073°42.4442'	347.4	10/9/2005	20:39:49	0	1:38:37	21.311	8.6
T	N43°25.5133'	W073°42.5163'	350.5	10/9/2005	20:40:28	0	1:39:16	21.387	7.0
T	N43°25.4618'	W073°42.5678'	350.5	10/9/2005	20:41:06	0	1:39:54	21.460	6.9
T	N43°25.4064'	W073°42.5884'	337.9	10/9/2005	20:41:42	0	1:40:30	21.526	6.6
T	N43°25.3730'	W073°42.5910'	330.0	10/9/2005	20:42:04	0	1:40:52	21.565	6.3
T	N43°25.3382'	W073°42.5884'	333.2	10/9/2005	20:42:33	0	1:41:21	21.605	5.0
T	N43°25.3189'	W073°42.5872'	333.2	10/9/2005	20:42:51	0	1:41:39	21.627	4.5
T	N43°25.2918'	W073°42.5846'	333.2	10/9/2005	20:43:20	0	1:42:08	21.658	3.9
T	N43°25.2764'	W073°42.5820'	336.3	10/9/2005	20:43:42	0	1:42:30	21.676	2.9
T	N43°25.2738'	W073°42.5820'	333.2	10/9/2005	20:43:46	0	1:42:34	21.679	2.7

F	Latitude	Longitude	Date	Time	Symbol-----	T	O	Comment
C	N43°25.2741'	W073°42.5823'	10/31/2005	16:30:29	Anchor	-	+	